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PATENT SPECIFICATION

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(54) IMPROVEMENTS IN DEVICES FOR DISPENSING SELF-ADHESIVE SLIPS SUCH AS LABELS

(71) We, BRUNTON & WILLIAMS LIMITED, a British Company, of 148—150 Peckham Rye, London SE22 9QN, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to devices in the form of blister packs for dispensing self-adhesive slips such as labels.

Self-adhesive labels, of the kind consisting of a small slip of paper or plastics one surface of which is covered with an adhesive to enable the label to be affixed to an article, are widely used, for example as price labels for use on articles to be sold in a shop. Such labels are often supplied attached by their adhesive-covered face to a flexible backing strip, e.g. of paper, having a surface from which the labels can be easily released by bending the strip at the location of the label in a direction away from the label so that the relative rigidity of the label causes an edge portion of the label to release itself from the backing strip to enable the label to be removed from the strip. The strips bearing labels are usually supplied wound onto reels from which the strip can be withdrawn as labels are required.

According to this invention there is provided a device in the form of a blister pack for dispensing self-adhesive slips such as labels from a reel of flexible backing strip bearing on one face a plurality of the slips spaced along the strip, comprising a support in the form of a sheet, and a container vacuum-formed from sheet plastics material and fixed to one face of the support, the container being shaped to contain the reel with the axis of the reel perpendicular to the plane of the support in such a manner that the reel can rotate about its axis within the container, the container having a mouth through which the strip can be drawn from the reel, the device including guide means for guiding the strip as it is drawn from the reel so that the strip is twisted to run

generally parallel to the plane of the support, with the slip-bearing face of the strip facing away from the surface of the support, and so that it thereafter passes over a straight edge portion of the support, in such a manner that the backing strip is in use bent over the straight edge portion so that each slip is released from the backing strip as the portion of the backing strip bearing the slip passes over the straight edge portion of the support.

Preferably, the guide means includes a laterally projecting portion of the container which defines a passage leading to a mouth opening near the straight edge portion of the support, the side wall of the projecting portion being shaped to effect the twisting of the strip as it moves from the reel to the mouth of the passage. Advantageously, the guide means also comprises a guide formed on the face of the support remote from the container and through which the backing strip is threaded after it has passed over the straight edge portion of the support.

Suitably, the container is formed of transparent plastics material through which the reel may be viewed. The support is preferably formed from card.

The invention will now be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of a device for dispensing self-adhesive labels, constructed in accordance with the invention,

Figure 2 is a front elevational view of the device of Figure 1, and

Figure 3 is a rear elevational view of the device of Figures 1 and 2.

Referring to the drawings, a device for dispensing self-adhesive labels 10 from a reel 12 of backing strip 14 bearing the labels is in the form of a so-called blister or bubble pack. The device comprises a support in the form of a rectangular card 16.

A container 18 for the reel, vacuum-formed in one piece from transparent plastics, is fixed to the front face 20 of the card 16. The container 18 comprises a

generally dish-shaped body portion 22, having a circular base 24 and a cylindrical side wall 26, and a portion 28 projecting from the cylindrical side wall 26 to form a passage for the strip 14 as it is drawn from the reel 12. The base 24 of the body portion 22 is formed centrally with a depression 30 forming an internal boss which fits into the centre of the reel 12 to hold the reel in position as, in use, it rotates within the container.

The projecting portion 28 of the container 18 has two parallel side walls 32 and 42, wall 32, forming a tangential extension of the cylindrical side wall 26 of the body portion 22 and extending parallel to one edge 34 of the card 16, and an outer wall 36 extending from the base 24 of the body portion 22 and joining the outer edges of the two side walls 32 and 42. The outer wall 36 and side walls 32 and 42 of the projecting portion 28 extend almost to a straight edge 38 of the card 16, and the outer wall 36 is inclined to the plane of the card so that the passage defined by the outer wall 36 and side walls 32 and 42 narrows as it approaches the edge 38 of the card, the passage ending in a narrow mouth 40 between the end of the outer wall 36 and the card.

The container 18 is formed with a peripheral flange 44 extending outwardly from the side walls of the body portion 22 and projecting portion 28. The flange 44 is fixed by means of an adhesive to the front face 20 of the card to hold the container in position on the card.

A reel 12 of backing strip 14 bearing on its outer face (i.e. the face which is exposed on the outermost turn of the reel) a plurality of discrete self-adhesive labels 10 spaced uniformly along the strip, is rotatably held within the body portion 22 of the container 18. The strip 14 extends from the reel 12 at a point near the inner end of the tangentially extending side wall 32 of the projecting portion 28 of the container and passes through the passage defined by the projecting portion 28 and emerges from the mouth 40 of the projecting portion. As it extends through the passage 28 the strip 14 experiences a quarter twist so that as it emerges from the mouth 40 the strip lies flat against the front face 20 of the card 16 with the label-bearing face of the strip facing away from the card, as shown in Figure 1.

The strip 14 thereafter passes over the edge 38 of the card 16 adjacent the mouth 40 of the container, the strip turning through 180° to lie flat against the rear face of the card, as shown in Figure 3. The strip 14 then passes through a first slot 46 in the card 16 parallel to the edge 38 to enter the passage portion 28 of the container 18 and through a second, V-shaped, slot 48 close to the first slot 46 to emerge again at the rear of the

card 16, the strip thus being held against the rear face of the card.

A flat annular ring of card 52 is disposed between the base 24 of body portion 22 and the reel 12, to provide protection for the reel and to provide a surface which can bear printed matter.

In use of the device, the card 16 is held in one hand and with the other hand portion 50 of the backing strip 14 emerging from the slot 48 at the rear face of the card is pulled, so that the strip is drawn from the reel 12. As the strip passes over the straight edge 38 of the card the backing strip 14 is bent through 180° and each label 10 in turn releases itself from the backing strip, the resistance to bending of the label overcoming the adhesion between the label and the backing strip. The labels are thus dispensed singly from the device and can be conveniently affixed to a desired article as they are released from the backing strip.

It will be apparent that the device provides an effective display means, the reel and labels being visible within the container. The card is provided with a hole 54 to enable it to be hung on a suitable hook on a display stand. Since the depth of the device is very little greater than the depth of the reel, a number of the devices may be hung one in front of the other on a single hook.

The device could be used for dispensing labels of different materials, such as paper or plastics, and of various shapes, such as circular or rectangular, the labels being plain or bearing suitable printing. The device could also be used to dispense, for example, the self-adhesive annular discs of fabric used to reinforce sheets of paper at the locations of holes punched in the sheets to enable them to be held in a binder. Labels of a very small size could be arranged in two or more rows on the backing strip, the labels being dispensed two or more at a time from the device.

It will be appreciated that many modifications could be made to the described embodiment. For example, if it is to contain a reel in which the labels are carried on the inner surface of the backing strip, as is particularly the case with some plastics labels whose rigidity would prevent them adhering to the outer surface of the strip as it was wound onto the reel, the strip would have to be twisted through a quarter turn in the direction opposite to that in the described embodiment to ensure that the labels were on the face of the strip opposite the face engaging the edge portion of the card over which the strip passes. The shape of the passage portion of the container could then be modified to suitably guide the strip as it is drawn from the reel. Instead of having a support formed of a single layer of card, the support could be formed of two

layers of card bonded together with an adhesive, the flang 44 of the container being gripped between the two layers, and the container 18 projecting through a correspondingly shaped aperture in the front layer. Instead of being flat, the support could be bent slightly, to give it rigidity or for decorative effect, the container 18 being suitably shaped to fit on the support.

10 WHAT WE CLAIM IS:—

1. A device in the form of a blister pack for dispensing self-adhesive slips such as labels from a reel of flexible backing strip bearing on one face a plurality of the slips spaced along the strip, comprising a support in the form of a sheet, and a container vacuum-formed from sheet plastics material and fixed to one face of the support, the container being shaped to contain the reel with the axis of the reel perpendicular to the plane of the support in such a manner that the reel can rotate about its axis within the container, the container having a mouth through which the strip can be drawn from the reel, the device including guide means for guiding the strip as it is drawn from the reel so that the strip is twisted to run generally parallel to the plane of the support, with the slip-bearing face of the strip facing away from the surface of the support, and so that it thereafter passes over a straight edge portion of the support, in such a manner that the backing strip is in use bent over the straight edge portion so that each slip is released from the backing strip as the portion of the backing strip bearing the slip passes over the straight edge portion of the support.

2. A device as claimed in claim 1, in which the guide means includes a laterally projecting portion of the container which

defines a passage leading to a mouth opening near the straight edge portion of the support, the side wall of the projecting portion being shaped to effect the twisting of the strip as it moves from the reel to the mouth of the passage.

3. A device as claimed in claim 2, in which the guide means includes a guide formed on the face of the support remote from the container and through which the backing strip can be threaded after it has passed over the straight edge portion of the support.

4. A device as claimed in any preceding claim, in which the container has a flat base wall, a side wall extending from the base wall, and a flange extending outwards from the edge of the side wall remote from the base in a plane parallel to the base, the flange being secured to the support to hold the container in position on the support.

5. A device as claimed in claim 4, in which the base wall is formed with an integrally projecting boss adapted to fit into the centre of a reel held in the container to hold the reel in position as it rotates within the container.

6. A device as claimed in any preceding claim, in which the container is formed of transparent plastics sheet.

7. A device as claimed in any preceding claim, in which the support is formed from card.

8. A device for dispensing self-adhesive slips such as labels and the like, constructed, arranged and adapted to operate substantially as described with reference to, and as shown in, the accompanying drawings.

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